

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,493	11/14/2003	Gary Edward Trewiler	134314	9211
23465	7590 09/08/2006		EXAMINER	
JOHN S. BE	ULICK		LE, HUNG	CHARLIE
C/O ARMSTI	RONG TEASDALE, LLP		,—————————————————————————————————————	
ONE METROPOLITAN SQUARE			ART UNIT	PAPER NUMBER
SUITE 2600			3663	
CT LOUIC A	40 62102 2740			e e

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)				
	10/713,493	TREWILER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Hung C. Le	3663				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	mely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 12 Ju	<u>ıne 2006</u> .					
2a) ☐ This action is FINAL . 2b) ☑ This						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1 - 20</u> is/are pending in the application.						
4a) Of the above claim(s) 8 - 20 is/are withdraw	4a) Of the above claim(s) 8 - 20 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 - 7</u> is/are rejected.	Claim(s) <u>1 - 7</u> is/are rejected.					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>14 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(a)						
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 03/09/2006. 5) Notice of Informal Patent Application (PTO-152) 6) Other:						

DETAILED ACTION

Response to Arguments

- Applicant's election with traverse of species A and subspecies of cutting through a rotor blade (Claims 1 – 7 readable thereon) is acknowledged.
- Applicant's arguments, see "Response to restriction requirement", filed 06/12/2006,
 with respect to claims 1 20 have been fully considered.

Applicant's traversal of the species election requirement was on the grounds that the species are "related". Applicant also alleged that a search and examination of all claims would not place a serious burden on the examiner.

These reasons are not found persuasive because species belonging to one genus are related but it does not follow that they are not patentable distinct.

Also, contrary to the requirement in Office Action dated May 26, 2006, applicant did not submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on record that this is the case. Also, contrary to applicant's allegation, each of the identified species would require a separate search in view of their mutually exclusive characteristics, and these individual searches would neither be the same nor co-extensive.

Accordingly, the election requirement is deemed proper and is therefore made

Application/Control Number: 10/713,493 Page 3

Art Unit: 3663

FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "...predetermined aerodynamic contour..." is a relative term. It is not known what all is meant and encompassed by the term predetermined.

The term "...substantially mirroring..." is a relative term. It is not known what all is meant and encompassed by the term.

5. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "...substantially mirrors..." is a relative term. It is not known what all is

Application/Control Number: 10/713,493 Page 4

Art Unit: 3663

meant and encompassed by the term.

6. Claim 5 recites the limitation "the same" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 7 are rejected under 35 U.S.C. 102(b) as being anticipated by either
 Meier et al. (US 6,438,838 B1) or Hellemann et al. (US 6,568,077 B1).

With respect to claim 1: Meier et al. (Abstract, Figs 1 – 4) discloses: A method for replacing a portion of a gas turbine engine rotor blade, the rotor blade having a contour defined by a blade first sidewall and a blade second sidewall, said method comprising:

cutting through the rotor blade such that a cut line extends from a leading edge of the blade to a trailing edge of the blade, and between the first sidewall and the

Page 5

second sidewall; and such that the cut line extends at least partially through a hollow portion of the blade defined between the first and second sidewalls: removing the portion of the rotor blade that is radially outward of the cut line; and coupling a replacement blade portion to remaining blade portion such that a newly formed rotor blade is formed with a predetermined aerodynamic contour that is one of an improvement in an aerodynamic performance over the original blade contour and substantially mirroring the original blade contour...

Hellemann et al. (Abstract, Figs. 1-7) discloses: A method for replacing a portion of a gas turbine engine rotor blade, the rotor blade having a contour defined by a blade first sidewall and a blade second sidewall, said method comprising: cutting through the rotor blade such that a cut line extends from a leading edge of the blade to a trailing edge of the blade, and between the first sidewall and the second sidewall; and such that the cut line extends at least partially through a hollow portion of the blade defined between the first and second sidewalls: removing the portion of the rotor blade that is radially outward of the cut line; and coupling a replacement blade portion to remaining blade portion such that a newly formed rotor blade is formed with a predetermined aerodynamic contour that is one of an improvement in an aerodynamic performance over the original blade contour and substantially mirroring the original blade contour..

While patent drawings are not drawn to scale, relationships clearly shown in the

drawings of a reference patent cannot be disregarded in determining the patentability of claims. See <u>In re Mraz</u>, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

With respect to claim 2: Meier et al. (Abstract, Figs 1-4) further discloses: wherein coupling a replacement blade portion further comprises welding the replacement blade portion to the remaining blade.

Hellemann et al. (Abstract, Figs. 1-7) further discloses: wherein coupling a replacement blade portion further comprises welding the replacement blade portion to the remaining blade.

With respect to claim 3: Meier et al. (Abstract, Figs 1-4) further discloses: machining the weld such that the newly formed rotor blade has a contour that substantially mirrors that of the original blade contour.

Hellemann et al. (Abstract, Figs. 1 - 7) further discloses: machining the weld such that the newly formed rotor blade has a contour that substantially mirrors that of the original blade contour.

With respect to claim 4: Meier et al. (Abstract, Figs 1 - 4) further discloses: automatically welding the replacement blade portion to the remaining blade portion.

Hellemann et al. (Abstract, Figs. 1 - 7) further discloses: automatically welding the replacement blade portion to the remaining blade portion.

With respect to claim 5: Meier et al. (Abstract, Figs 1-4) further discloses: wherein coupling a replacement blade portion further comprises coupling a replacement blade portion to the remaining blade portion that is fabricated from a material that is the same material used in fabricating the original rotor blade.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: wherein coupling a replacement blade portion further comprises coupling a replacement blade portion to the remaining blade portion that is fabricated from a material that is the same material used in fabricating the original rotor blade.

With respect to claim 6: Meier et al. (Abstract, Figs 1-4) further discloses: wherein cutting through the rotor blade comprises cutting through a turbine rotor blade.

Hellemann et al. (Abstract, Figs. 1 – 7) further discloses: wherein cutting through the rotor blade comprises cutting through a turbine rotor blade.

With respect to claim 7: Meier et al. (Abstract, Figs 1-4) further discloses: wherein coupling a replacement blade portion to a remaining blade portion further comprises coupling the replacement blade portion to the remaining blade portion using a single

weld joint extending along the cut line.

Hellemann et al. (Abstract, Figs. 1-7) further discloses: wherein coupling a replacement blade portion to a remaining blade portion further comprises coupling the replacement blade portion to the remaining blade portion using a single weld joint extending along the cut line.

9. The statements of intended use or field of use, e.g., "for replacing, etc..." clauses are essentially method limitations or statements or intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Pearson, 181 Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. <u>Ex parte Masham</u>, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. <u>Hewlett-Packard Co. v. Bausch & Lomb Inc.</u>, 15 USPQ2d 1525, 1528.

Application/Control Number: 10/713,493 Page 9

Art Unit: 3663

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung C. Le whose telephone number is 571-272-8757. The examiner can normally be reached on M-F: 07:30am -05:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

Application/Control Number: 10/713,493

Art Unit: 3663

free).

HCL 06/28/06 THOMAS BLACK
SUPERVISORY PATENT EXAMINER

Page 10